AMENDMENTS TO THE DRAWINGS:

The attached Replacement Drawing Sheet includes changes to Fig. 3. Fig. 3 has been amended to add reference numerals "1" and "2".

REMARKS

Claims 1 - 10 are pending in the present application. By this Amendment, new claims 11-14 have been added. No new matter has been added. It is respectfully submitted that this Amendment is fully responsive to the Office Action dated March 2, 2005.

Allowable Claim Subject Matter:

Applicants gratefully acknowledge the indication on page 4 of the Office Action that claims 4, 5, 9 and 10 would be allowable, if amended, to include all of the limitations of the base claim and any intervening claims.

However, for at least the reasons discussed below, it is respectfully submitted that all of claims 1 - 14 are allowable.

Specification:

The specification stands objected on page 2 of the Action due to minor informalities. However, the Abstract and Fig. 3 has each been amended to correct such informalities. More specifically, Fig. 3 has been amended to include reference numerals "1" and "2". As such, withdrawal of this objection is respectfully requested.

As to the Merits:

As to the merits of this case, the Examiner sets forth the following rejections:

1) claims 1-13 stand rejected under 35 USC 102(b) as being anticipated Harrington (U.S. Patent No. 4,005,364); and

2) claims 6-8 stand rejected under 35 USC '103(a) as being unpatentable over Harrington in view of Klauder et al. (U.S. Patent No. 6,029,524).

Each of these rejections is respectfully traversed.

Independent claim 1 calls for *a first counter which counts reference clocks during one cycle of a signal to be measured or a period which is integer times as long as the one cycle, a time difference detection circuit which detects time difference between the signal to be measured and the reference clock, a time expansion circuit which expands an output pulse width of the time difference detection circuit by a given magnification, and a second counter which counts the reference clocks during the pulse width which is expanded by the time expansion circuit, wherein*

the frequency of the signal to be measured is obtained based on count values of the first and second counters. Independent claim 6 is drawn to a similar embodiment.

With regard to claim 1, the Examiner asserts that Harrington discloses:

> a first counter (46) which counts reference clocks during one cycle of a signal to be measured (column 3 lines 43-62), a time difference detection circuit which detects time difference between the signal to be measured and the reference clock (column 5 lines 4-40), a time expansion circuit which expands an output pulse width of the time difference detection circuit by a given magnification (column 4 lines 1-22), and a second counter which counts the reference clocks during the pulse width which is expanded by the time expansion circuit (column 7 lines 1-6), wherein the frequency of the signal to be measured is obtained based on count values of the first and second counter (column 3 lines 8-35).[1]

However, the Examiner is mis-characterizing the teachings of Harrington. That is, while Harrington may disclose a counter 46 in Fig. 2, the input signal 26 to the counter 46 fails to constitute a reference clock signal.

For example, as shown in Fig. 3 of the present application, the counter 31 counts reference clocks from the clock during one cycle of the output F or during a period which is integer times as long as the one cycle.

[1] Please see, lines 1-9, page 3 of the Action.

As such, it is respectfully submitted that Harrington fails to disclose or fairly suggest the features of claim 1 concerning *a first counter which counts reference clocks during one cycle of a signal to be measured or a period which is integer times as long as the one cycle.*

In addition, it is respectfully submitted that lines 4-40 of col. 5 of Harrington relied upon by the Examiner fail to disclose the features of claim 1 concerning *a time difference detection circuit which detects time difference between the signal to be measured and the reference clock.*

That is, while Harrington may disclose that the period counters 16 and 20 measure the number of pulses of the period-measuring frequency 36 between successive pulses from the shaper 12, the Examiner fails to appreciate that in claim 1 the time difference detection circuit detects the time difference between the signal to be measured and the reference clock. In other words, neither the period-measuring frequency 36 nor the shaper 12 constitutes the reference clock.

Furthermore, it is respectfully submitted that lines 1-22 of col. 4 of Harrington relied upon by the Examiner fail to disclose the features of claim 1 concerning *a time*

expansion circuit which expands an output pulse width of the time difference detection circuit by a given magnification.

That is, the discussion in lines 1-22 of col. 4 of Harrington corresponds to the automatic prescaler 10 of Fig. 2. As discussed above, the Examiner relies on the period counters 16 and 20 for teaching the feature of claim 1 concerning a time difference detection circuit. However, as clearly shown in Fig. 1 of Harrington, the automatic prescaler 10 does not expand an output pulse of the period counters 16 and 20 by a give magnification.

Finally, it is respectfully submitted that Harrington also fails to disclose or fairly suggest the features of claim 1 concerning *a second counter which counts the reference clocks during the pulse width which is expanded by the time expansion circuit, wherein the frequency of the signal to be measured is obtained based on count values of the first and second counters.*

That is, the period counters 16 and 20 disclosed in col. 7, lines 1-6 of Harrington fail to constitute a second counter which counts the reference clocks during the pulse width which is expanded by the time expansion circuit, wherein the frequency of the

signal to be measured is obtained based on count values of the first and second counters. Moreover, it is respectfully submitted that the Examiner has already relied upon the period counters 16 and 20 for teaching the feature of claim 1 concerning a time difference detection circuit.

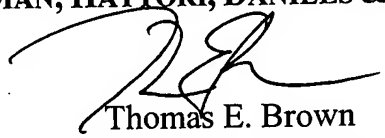
In view of the aforementioned remarks, Applicants submit that that the claims are in condition for allowance. Applicants request such action at an early date.

If the Examiner believes that this application is not now in condition for allowance, the Examiner is requested to contact Applicants' undersigned attorney to arrange for an interview to expedite the disposition of this case.

If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,

WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP



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